RETURN THE PAID-IN CAPITAL OF THE FEDERAL RESERVE BANKS

The purpose of this article is to trace in broad outline the changes which have taken place in the capital, earnings, and surplus of the Federal Reserve banks and to suggest a change in the law with reference to the capital of the banks.

Capital.—The growth of the capital of the Federal Reserve banks is shown in the following table:

PAID-IN CAPITAL OF THE 12 FEDERAL RESERVE BANKS*

Date	Capital in Thousands
December 31, 1914	$18,051
December 30, 1915	54,913
December 29, 1916	55,694
December 28, 1917	70,442
December 31, 1918	80,767
December 31, 1919	87,407
December 30, 1920	99,770

* The figures for the years 1914 to 1919 are taken from the annual reports of the Federal Reserve Board. The figure for the year 1920 is taken from the *Federal Reserve Bulletin* for January, 1921.

The Federal Reserve Act provided that each national bank must subscribe to an amount of stock of the Federal Reserve bank equal to 6 per cent of its capital and surplus. One-half of the subscription was to be paid up in instalments as follows: one-sixth (of the subscription) on call of the Federal Reserve Board (the board called for payment on November 2, 1914); one-sixth within three months after the first call; and one-sixth within six months after the first call. The other half of the subscription remains subject to the call of the Federal Reserve Board. State banks becoming members subscribe for the same percentage of their capital and surplus. When member banks increase their capital or surplus they must subscribe for more stock in the Federal Reserve bank. Or if they decrease their capital or surplus they must surrender a part of their stock.

The explanation of the changes in the amount of paid-in capital of the Federal Reserve banks is quite simple. There has never

been a net decrease. Slight decreases have occurred when national banks have liquidated or when state bank members have withdrawn or liquidated. The increases have been the result of the partial payment of subscriptions, the admission of state banks as members, the starting of new national banks, and increases in the capital or surplus of member banks.

Thus the influence of the payment in instalments is seen in the increase in the year 1915 over the year 1914. The great increase arising from state banks joining the system came after the United States had entered the war. On December 31, 1914, 13 institutions with state charters had joined the system. Their total capital and surplus was $17,884,000.[1] At the end of 1915, 32 state banks had become members. The year 1916 added 6 more. During the year 1917, as the result of more liberal terms of entry, the appeal to patriotism made by the President of the United States, and the activities of the American Bankers' Association, the membership increased to 250. In 1918, the total rose to 930; at the end of 1919, it was 1,181, and on December 30, 1920, 1,487 state institutions with a total capital and surplus of $1,016,399,314.[2] Therefore we may conclude that about $30,492,000 of the capital of the Federal Reserve banks on December 30, 1920, represented that contributed by state institutions.

We may next consider the part which has come from the national banks. The total capital of $18,051,000 on December 31, 1914, would represent a total capital and surplus of member banks of $1,805,100,000, since 1 per cent of the capital and surplus had been paid in as the first instalment. Subtracting the capital and surplus of the state banks which were members, we find that the capital and surplus of the national banks at that time was $1,787,216,000. Subtracting the capital and surplus of member state banks, as given above, from the capital and surplus of all member banks on December 30, 1920, leaves $2,309,300,000 as the capital and surplus of the national banks. So $69,278,000 was

[1] *First Annual Report of the Federal Reserve Board*, p. 20.

[2] This total was obtained by taking the total for the end of November, 1920, as given in the *Federal Reserve Bulletin* for December, 1920, p. 1299, and adding to it the capital and surplus of the state banks joining in December as given in the *Federal Reserve Bulletin* for January, 1921, p. 68.

their contribution to the capital of the Federal Reserve banks. Thus a large part of the growth of the capital of the Federal Reserve banks has come from the increase in the number of the national banks and the increases in their capital and surplus. It is to be remembered that many state banks became national banks instead of joining the system as state banks.

Earnings and surplus.—The war upset many predictions, but none so decidedly as the prediction that the Federal Reserve banks would not be able to earn their prescribed dividend of 6 per cent. Indeed, the question now is what disposition should be made of the earnings, and considerable effort has been made to refute the charge of profiteering.

The net earnings of all the Federal Reserve banks for the various years are given below. The figures are for earnings after expenses were paid, but before dividends were deducted.

EARNINGS OF THE FEDERAL RESERVE BANKS*

Period	Amount
November and December, 1914	$ 123,765
Year 1915	639,881
Year 1916	2,750,999
Year 1917	11,202,993
Year 1918	55,446,979
Year 1919	82,038,785
Year 1920	149,295,000

* The figures for the years from 1914 to 1919 are taken from the annual report of the Federal Reserve Board. The figure for the year 1920 is taken from the *Federal Reserve Bulletin* for February, 1921.

It will be remembered that the banks were started during a period of depression intensified by the disturbances in foreign trade and exchange incident to the start of the world-war. When we, as a neutral nation, began supplying food and munitions to the belligerents, part of our payment came in the form of gold. This gold, together with the lower reserve requirements for national banks which came in with the Federal Reserve System, caused an easy money market. This meant little rediscounting at the Federal Reserve banks and low rates of discount. So, for the early years, many of the Reserve banks did not earn their dividends. An examination of the records shows that organization expenses were carried as an asset as late as December 30, 1916, by the Kansas City bank.

The gross earnings, of course, depend on the volume of earning assets and the level of rates charged. The total earning assets were as follows for the several years:

EARNING ASSETS OF THE FEDERAL RESERVE BANKS*

End of Year	Earning Assets in Millions
1914	$ 11
1915	83
1916	222
1917	1,060
1918	2,291
1919	3,090
1920	3,263

* The figures for the years from 1914 to 1919 are taken from the annual reports of the Federal Reserve Board. The figure for the year 1920 is taken from the *Federal Reserve Bulletin* for January, 1921.

It is seen that the big advance in earning assets came after we had entered the war. But the rate was held low to assist the Treasury Department in the flotation of loans, so the earnings were not so great as they might otherwise have been. As soon as the Federal Reserve Board felt that it could raise rates without violating the promise to those who had heeded the injunction "borrow and buy," it did so. This increase in rates along with the increase in earning assets due to the post-armistice boom, explains the big increase in earnings in 1919 and 1920.

When the earnings became large the banks began a policy of setting aside liberal reserves for various things and writing off the cost of furniture and fixtures and the value of buildings on the land later to be built upon. They also assumed the cost of the check-collection system. This wise and generous system should, by all means, be continued. Undoubtedly the banks will utilize a part of their earnings to write off a considerable portion of the cost of the bank buildings that are to be erected.

When times become more normal, particularly when liquidation is completed and the government stops absorbing funds by short-term borrowing, we may expect the earning assets of the Federal Reserve banks to decrease and the rates to be at a lower level.

The original act made the following provision for disposition of the earnings. The member banks were to receive a cumulative dividend of 6 per cent a year on the paid-in capital stock. One-half of what was left was to go to the government as a franchise

tax and one-half was to go to surplus until it equaled 40 per cent of the paid-in capital. After the surplus had reached 40 per cent all of the earnings above dividends were to go to the government. On June 30, 1918, all accumulated dividends had been paid by all of the banks.

On March 3, 1919, the law was changed to allow all of the earnings above dividends (including those of the year 1918) to go to surplus until it reached 100 per cent of the subscribed capital and thereafter 10 per cent to go to surplus. The government receives what does not go to surplus. In accordance with these provisions the surplus account has stood as follows:

SURPLUS OF THE FEDERAL RESERVE BANKS

Beginning of Year	
1918	$ 1,134,000
1919	22,738,000
1920	120,120,000
1921	202,306,000

The figure for 1919, of course, does not reflect the change in the law mentioned above. The adjustment of surplus is now made after December 31 and June 30 each year.

Policy with respect to capital and surplus.—This great growth of capital and surplus raises the question as to how much capital and surplus the Federal Reserve banks really need. We are familiar with the function of capital and surplus in the individual bank. They act as a guaranty fund to protect the liabilities to the public. The function of the capital and surplus of a central bank is not so clear. It is the function of the central bank to mobilize the banking reserves of the country and to control the discount rate and the general credit situation. Typically it deals primarily with other banks, and their capital and surplus safeguard the central bank. That is, the paper that is rediscounted bears the indorsement of the bank that presents it. Thus the chance for loss is very slight, since the capital and surplus of the member bank would have to be exhausted before the central bank could lose. Of course, in so far as the European banks have private customers and the Federal Reserve banks engage in "open market" transactions there is the same need for capital and surplus as in the case of the private bank.

The law assumes that the capital of the Federal Reserve banks should change in exact proportion with the capital and surplus of the member banks. Presumably the idea was that in this way the capital of the Federal Reserve banks would be kept in some fixed proportion to the banking business of the country. However, two disturbing elements may be noted: First, the Federal Reserve System has made it possible for the member banks to expand their business without expanding their capital. This decreases the proportion which the capital of the Federal Reserve banks bears to the business of the member banks. Second, the addition of many state banks has increased the proportion of the capital of the Federal Reserve banks to the business of all of the banks of the country.

It will be interesting to see whether the experience of other countries shows that there is any significant relation between the capital and surplus of the central banks and the capital and surplus of the banks of the country or to the demand liabilities of the banks of the country. The figures below are all taken from the volume on statistics for Great Britain, Germany, and France in the "Publications of the National Monetary Commission."

Taking the year 1906 as a normal year, we may compare, first, the capitalization of the central banks with the capitalization of the other banks in the country. The tables call them the principal banks. In England, the capital and surplus of the Bank of England was £17,553,000, about 6 per cent of the £281,756,000 capital and surplus of the other banks. In Germany, the other banks had 3,204,101,000 marks capital and surplus to the 244,814,000 marks of the Reichsbank. The Reichsbank's capital and surplus was about 8 per cent of the others. The Bank of France shows a higher percentage, viz., 18 per cent, for its capital and surplus was 225,000,000 francs to 1,229,000,000 francs for the other banks. These figures do not disclose much uniformity.

Next we will compare, in 1906, the capitalization of the central bank with the demand obligations of all of the other banks in the country. The capital and surplus of the Bank of England, £17,553,000, was 1.2 per cent of the deposits and current accounts of the other banks, £1,439,000,000. In Germany, the capital and surplus of the Reichsbank, 244,800,000 marks, was 3.7 per cent of

the deposits and current accounts of the other banks, 6,671,000,000 marks. The Bank of France had a capital and surplus of 225,000,000 francs, which was 4.2 per cent of the 5,320,000,000 francs of deposits and current accounts of the other banks. The figures indicate a fair amount of correspondence between Germany and France. The smaller figure for England is due to the more extensive use of checks and the wider spread of deposit banking.

After all, these figures are not very significant, if we see what has happened in the various countries over a considerable period of time. In 1876, the Reichsbank had a capital and surplus of 131,000,000 marks, which was 19 per cent of the 745,000,000 marks capital and surplus of the other German banks. But in 1907, its 225,000,000 marks capital and surplus was only 7 per cent of the 3,354,000,000 marks capital and surplus of the other German banks. The result is still more striking when we compare the changes in the deposits and current accounts. In 1876, the capital and surplus of the Reichsbank, 131,000,000 marks, was 27 per cent of the 479,000,000 marks deposits and current accounts of the other banks. In 1907, the capital and surplus of the Reichsbank had increased to 225,000,000 marks, but the deposits and current accounts of the other banks had increased to 7,067,000,000, so the Reichsbank's capital and surplus was only 3 per cent of the amount.

In the United Kingdom, the capital and surplus of the Bank of England in 1889 was £17,721,000 and actually declined to £17,553,000 in 1908. Between the same dates the capital and surplus of the other banks increased from £164,779,000 to £301,706,000 and the deposits and current accounts varied from £869,000,000 in 1892 to £1,520,350,000 in 1908.

The showing in France is similar. In 1888, the Bank of France had 226,515,000 francs capital and surplus; in 1906, it had 225,015,000 francs, a slight decrease. Yet during the same period the deposits and current accounts of the other banks rose from 1,924,000,000 to 5,320,000,000 francs, and their capital and surplus banks increased from 650,509,000 francs to 1,229,000,000 francs.

From this bewildering variety of changes in different countries and at different times in the same country, the conclusion seems to be inevitable that the relation of the capital and surplus of the

central bank to the capital and surplus or to the demand obligations of the other banks of the country is not a matter of great importance. A little consideration will show that the percentage of reserve held by the central bank is the crucial matter. When Bagehot wrote "Lombard Street" it was the reserve held by the Bank of England that he condemned as inadequate, not its capitalization. And it is the reserve which still commands the attention of the writers in the financial periodicals.

If reserve then is the important problem, it is evident that, in the United States, the problem of providing the Federal Reserve banks with adequate funds is to be solved by considering the reserves which the member banks are required to hold with Federal Reserve banks rather than the amount of the capital and surplus of the Federal Reserve banks. The contribution of a member bank to capital is 3 per cent of its own capital and surplus, while its contribution to reserves is 7, 10, or 13 per cent (depending upon its classification as central reserve city, reserve city, or country) of its demand deposits. The latter amount will of course be much greater.

We may return to our problem of the disposition of the earnings and the capitalization (including both capital and surplus) of the Federal Reserve banks. The disposition of the part of the earnings of the Federal Reserve banks which goes to the government presents no problem. The provisions of the law are admirable. It provides that the funds may be used to retire United States bonds or to strengthen the gold reserve back of the United States notes. So long as the war debt is so great and the bonds are selling below par, the Secretary of the Treasury will probably elect to use the money to retire bonds. As a measure to simplify our currency and to get the government out of the business of issuing credit money, the provision to add to the gold reserve back of the United States notes is attractive. Presumably if the gold reserve was brought up from $150,000,000 to $346,681,016 the United States notes would be retired when redeemed.

The policy with reference to the part of earnings which goes to surplus is the difficult problem. Shall we continue to increase the capital and surplus indefinitely? The present capital and

surplus of the Federal Reserve banks is more than three times the capital and surplus of any European central bank. The surplus itself is more than double the capital and surplus of any European central bank.

If we wish to reduce the total, we might get rid of some of the surplus. But the policy of cutting down the total by returning the paid-in capital to the member banks has greater advantages than reducing the surplus. Under this plan the banks would still subscribe 6 per cent of the capital and surplus to the stock of the Federal Reserve banks, but none of it would be paid in. The process of returning the subscriptions need not start until conditions are somewhat more normal. It would, of course, be done gradually. The advantages of this course are as follows: (1) It would relieve the Federal Reserve banks of any necessity of considering whether earnings would be enough to pay dividends or not. The discount policy could be based entirely on considerations of the credit and business situation of the country. (2) It would remove one of the reasons advanced by the state banks for not entering the system, namely, the necessity for investing 3 per cent of their capital and surplus in the stock of the Federal Reserve banks and getting a return of only 6 per cent on it. The desirability of having all banks within the system is beyond question. So, even though the objection has little merit, it might be well to remove the cause of complaint.

There would be no need to change the provision about future growth of the surplus. For, in the future, the growth will be comparatively slow, because, after the surplus has become 100 per cent of the subscribed capital, only 10 per cent of the earnings will be added to it. And, while it is dangerous to predict, probably the earnings in the future will be less in amount both because of lower discount rates and because of the decreased volume of rediscounting.

We conclude, then, that considerable advantage could be gained by returning to the member banks the capital stock they have paid in to the Federal Reserve banks.

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